Chapter V

URBAN DESIGN

CHAPTER V - URBAN DESIGN

Urban design is the design of groups of buildings and the relationships of the buildings to each other. This urban design element provides a framework which ensures the quality of the built environment. It will also serve as a guide to developers preparing for use permit and design review. This section of the plan will aid in the integration of new development into the existing City structure.

It is an objective of the urban design element to combine public purpose with private objectives. These urban design guidelines deal with building height, the relation of new buildings to existing neighborhoods, and the relationships between buildings and the street.

The urban design guidelines establish standards which future developments must follow. Development in the RPR zone and all Optional Method Developments in the RPC zone will be reviewed by a Design Review Board, an appointed advisory board consisting of qualified professionals with expertise in the fields of architecture, landscape architecture, urban design, transportation planning, and other design related fields. The Board will utilize the Rockville Pike Corridor Neighborhood Plan guidelines and standards to guide their recommendations for achieving the type of development which fulfills the community's goals and objectives.

The criteria for evaluating these developments would include compliance with the Plan, building form, streetscape elements (parking areas, street furniture, signs and amenities), and landscaping. The Design Review Board's recommendations will be submitted to the Planning Commission during its Use Permit review.

The goal of the Urban Design Plan is to improve the appearance and quality of development in the corridor. The attractiveness of the Pike as a working, shopping, entertainment and transportation area will be enhanced by the following:

- 1. Making Rockville Pike itself attractive by:
 - A. Implementing of the streetscape plan
 - B. Landscaping within the public right of way and parking lots
 - C. Placing utility lines underground
 - D. Continued enforcement of the City's Sign Ordinance
 - E. Establishing of a build-to-line along Rockville Pike

- 2. Minimizing apparent bulk of new development by:
 - A. Requiring closely spaced trees
 - B. Encouraging arcades and additional landscaping
 - C. Requiring that residential development above 75 feet step back beyond the cornice line
- 3. Making walking safe, convenient and attractive by:
 - A. Providing wide sidewalks
 - B. Lining streets with closely spaced trees
 - C. Requiring that a portion of new buildings be placed at the buildto-line to minimize walking distances and provide pedestrian oriented shopping opportunities
 - D. Encouraging overpasses across the Pike and other roads in the corridor

The above items will create improvements that benefit owners, merchants, shoppers, citizens and motorists.

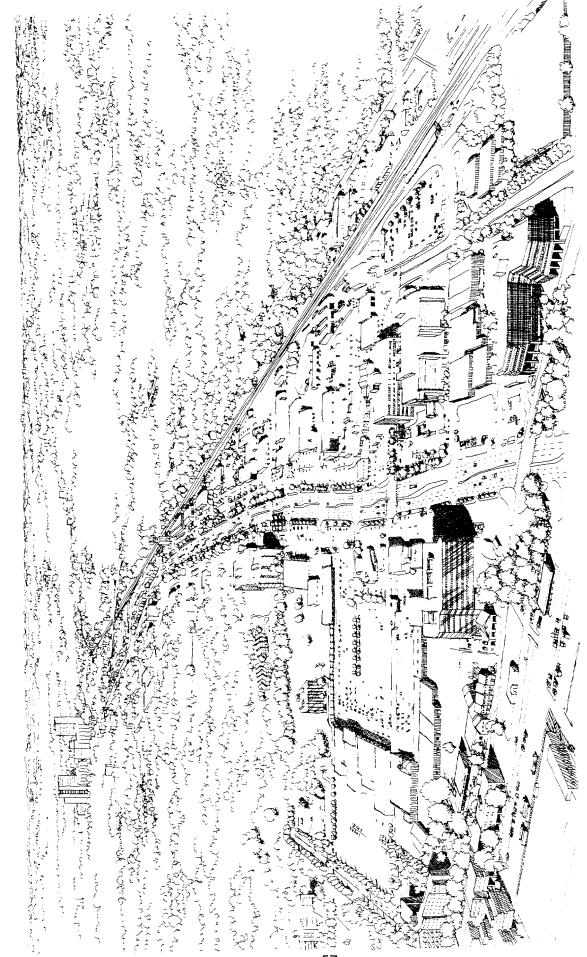
Improved access and appearance will strengthen the regional position of the corridor. Cooperation between property owners and the City has resulted in landscaping and uniform signage that sets Rockville apart from surrounding Montgomery County. This Plan endorses the initiatives of the past and provides additional guidance in areas that will increase the aesthetic and functional qualities of the Pike.

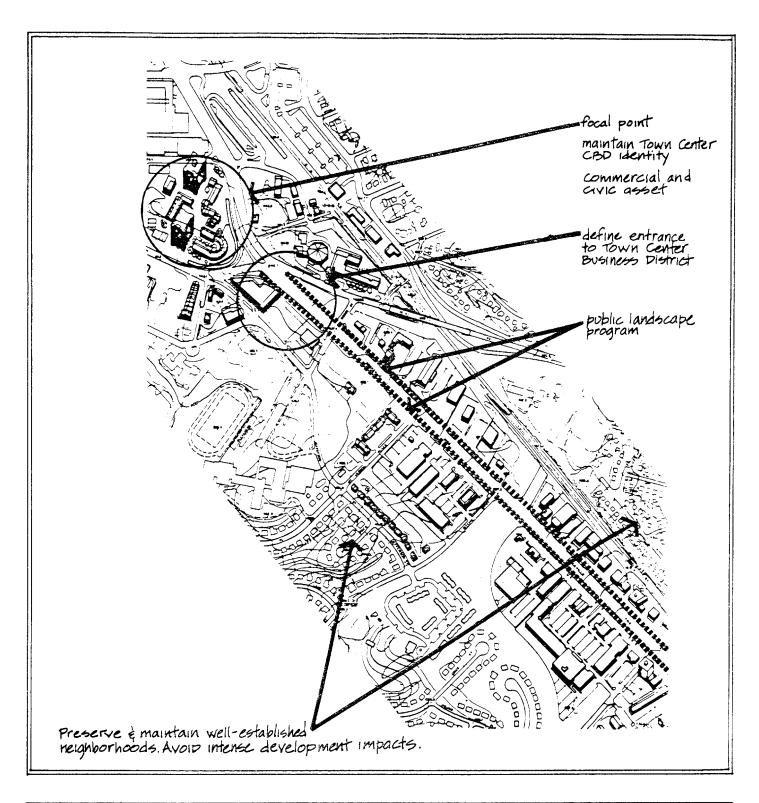
The Rockville Pike Corridor within the City is greener than the surrounding County. This is due to the presence of berms and the planting of trees along the street. One of the goals of the urban design element is to continue and to improve the current landscaping and the planting of trees.

The Plan recommends that power lines should be placed underground and trees planted as part of the comprehensive streetscape plan implementation. In time, the Pike and the entire Corridor will be transformed. The tree canopy will provide an entrance to Rockville, and the Corridor will be distinguished from the rest of Route 355.

The character of the Pike has evolved from strip commercial area into a mixture of retail and office uses. In the process buildings have been built that are close to the building restriction line and the maximum height. This has created a more urban character which this plan maintains by keeping the 75' height limit and establishment of the build-to-line. Conformance with existing requirements for berms, street trees and uniform signage has improved the appearance of the Pike.

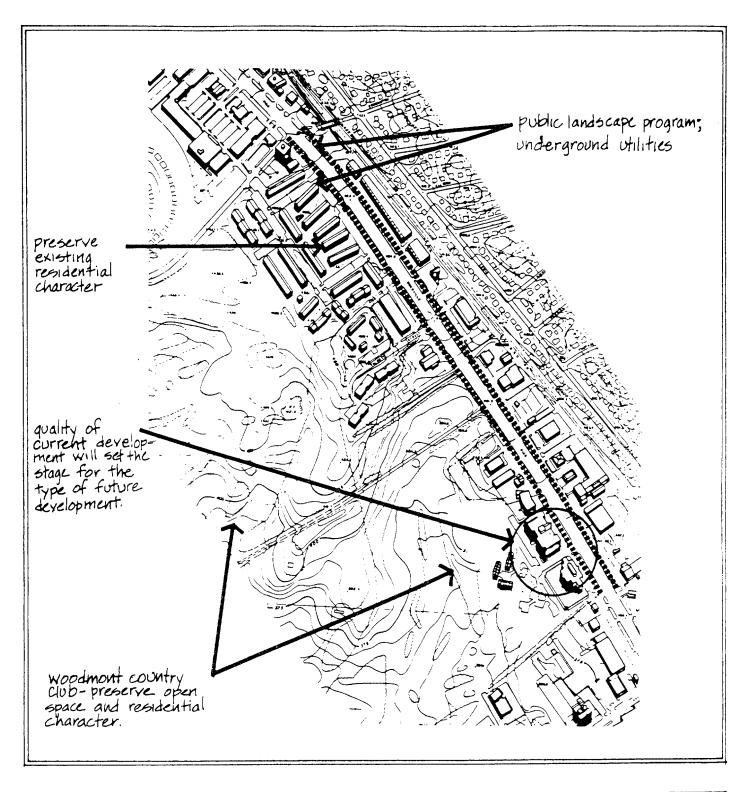
FACING PAGE: AERIAL VIEW OF ROCKVILLE PIKE, 1986





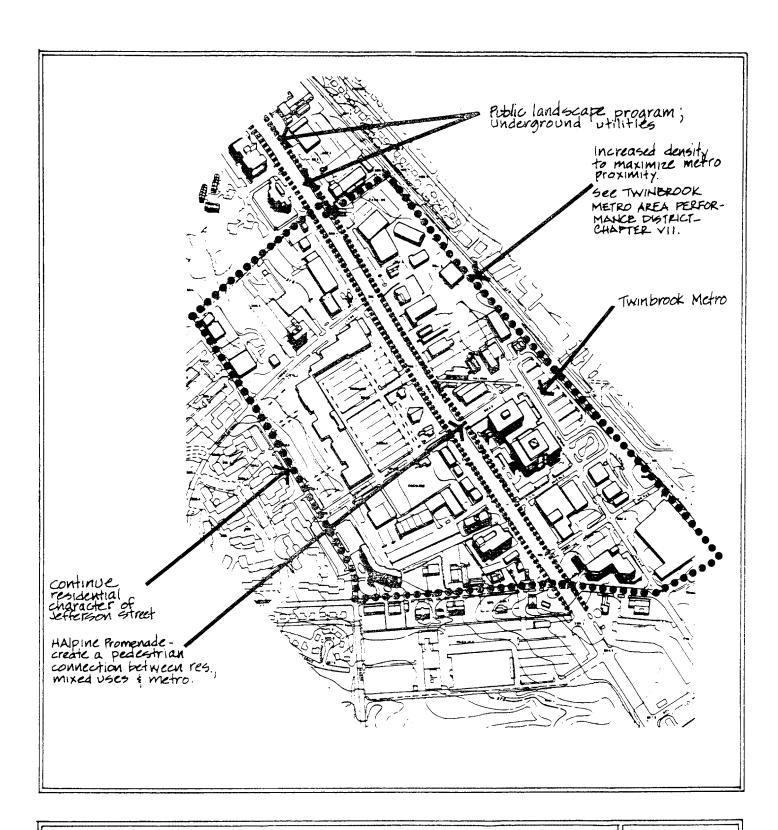
NORTHERN PIKE ANALYSIS



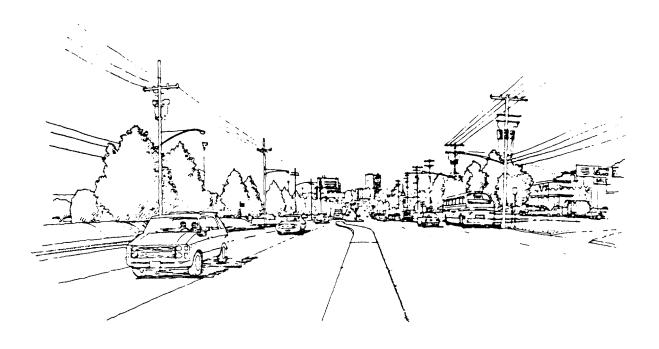


MIDDLE PIKE ANALYSIS





SOUTHERN PIKE ANALYSIS



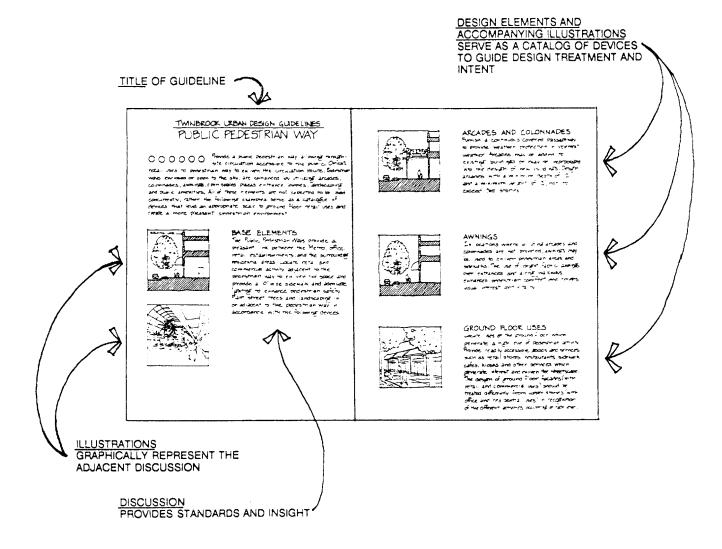
BOCKVILLE PIKE LOOKING NORTH from EDMONSTON DRIVE . 1986



ROCKVILLE PIKE LOCKING MORTH from EDMONSTON DRIVE - 1996

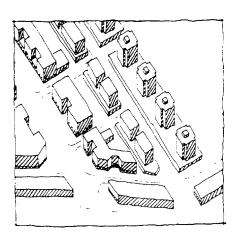
Urban Design Guidelines

The Urban Design Guidelines are intended to provide a framework which will ensure the quality of the built environment in the Rockville Pike Corridor. They serve as a general guide to developers and architects preparing for design review by illustrating the City's objectives. The guidelines highlight and supplement certain requirements set forth in the Zoning Ordinance in order to visually define the intent of the regulations and to give a number of suggestions for ways to achieve the desired outcome (see pages 63 to 80) Several ordering devices have been used to provide clarity and continuity:



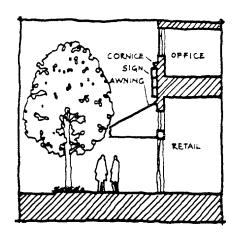
RPC URBAN DESIGN GUIDELINES ROCKVILLE PIKE BUILD TO LINE

Place at least 50% of the Rockville Pike facade 135' from the centerline of Rockville Pike to provide a consistent visual image. Orient retail and services to the street and provide amenities that promote pedestrian activity.



BUILD TO LINE

A continuous building line creates a consistent street edge and provides a positive visual image to pedestrians and motorists. In order to achieve the desired sense of scale and space, it is most important to maintain this continuous edge at the lower floors of buildings where bedestrians and motorists are located. The shape of streets is improved and sedestrian comfort is enhanced by maintaining a uniform building line at the first two floors although well-defined open spaces may bunctuate the facade to add interest and scale.



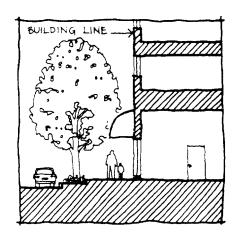
FACADE TREATMENT

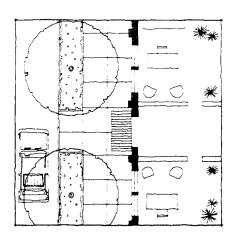
The design of ground floor facades should recognize the different activities occurring at each level. The upper level with office and residential uses should complement the pedestrian level with its retail and commercial uses. Signs, special features, entrances, and service and parking access can be more easily integrated with the facade when the pedestrian level treatment recognizes the functional differences of the upper levels. This recognition can be achieved with cornices, changes of materials and other devices that allow changes to occur at grade without affecting upper facades.

RPC URBAN DESIGN GUIDELINES

BUILDING LINE AT SECONDARY STREETS

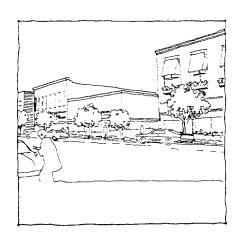
Place the lower floors of buildings at the building line or alternate building line and orient retail uses and services to the street. Create interest at the pedestrian level with landscaped setbacks, public amenities, awnings, plazas and other devices. Where the building line is not coincident with the Right-of-Way line the building line shall accompodate the streetscape standards.





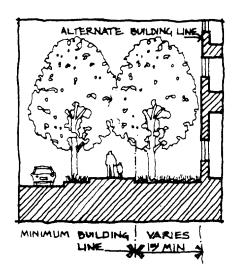
STREETSCAPE STANDARDS

The pedestrian environment should be made safe, convenient and attractive along secondary streets. To achieve this, the standard street-scape features a 5' wide tree planting strip along the roadway and a 10' wide sidewalk at the building edge. Street trees shall be planted approximately 30' o.c. and not more than 40' apart. Trees shall be selected from the list of "Acceptable Trees for Street Planting in the City of Rockville, MD" and at the time of planting shall be a minimum of 3.5" in caliper and 15' high.



MINIMUM BUILDING LINE

Maintain visual continuity of the streetscape by placing the building edge at an established building line. Secondary and minor streets may have significant pedestrian traffic even though there may be few shops or restaurants located along them. Pedestrian comfort should therefore remain as a prime design consideration.



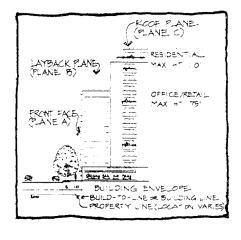
ALTERNATE BUILDING LINE

If greater setbacks from the standard
strectscape is desired or proposed then

it shall be a minimum of 15' and include
an additional row of trees on the building
side of the sidewalk. The alternate building
line may be interrupted to create plazas,
open spaces and courtyards. The pedestrian
environment can be enhanced by locating
parking behind the building and by providing
safe and attractive through circulation for
pedestrians.

PPC URBAN DEGIGN GUIDELINES BUILDING ENVELOPE

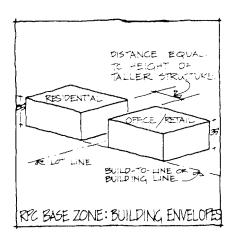
Building envelopes define the vertical and horizontal boundaries of suildable area on individual sites. Consistent relationships between the street and new buildings result from the application of the building envelopes. They ensure that new developments are compatible with surrounding neighborhoods by providing adequate light and our for nearby structures and adjacent streets. Farcel by parcel building envelopes are indicated in the functional Plans and Sections. Characteristic elements are embodied in the accompanying illustrations and descriptions.



DESCRIPTION

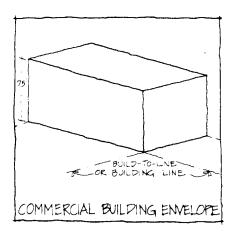
Building Envelope is defined by a combination of the following restrictions:

- · height of the building
- · layback plane
- · distance between building and lot lines (settacks)
- · distance between building and street (build to/ building line)
- · distance between adjacent buildings
- · solar access requirements
- · MAXIMUM FA.R.
- · residential density
- · permitted uses
- · required open space on the lot



RPC BASE ZONE

Commercial and residential building envelopes are limited in height to 35'. No settacks from the side or rear lot lines are required unless residential land abouts the adjacent lot. In that case, the setback must equal the building height of the taller structure.

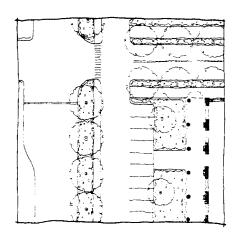


RPC OPTIONAL METHOD: TWINBROOK METRO AREA

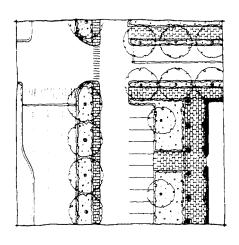
Commercial and residential building envelopes shall be limited in height to 75! No setbacks from the side or rear lot lines are required unless residential land abouts the adjacent lot. In that case, the setback must equal the building height of the tailer structure.

RPC URBAN DESIGN GUIDELINES ROCKVILLE PIKE STREETSCAPE

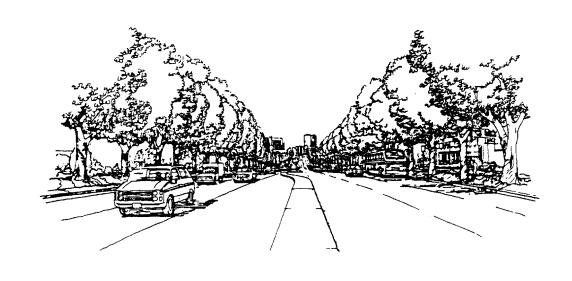
Provide a consistent visual image along Rockville Pike. A pleasant pedestrian environment can be achieved by lining the street level with arcades and retail stores that adjoin the sidewalk and by following the streetscape Requirements, City of Rockville Sign Ordinance, and Access Management Plan.

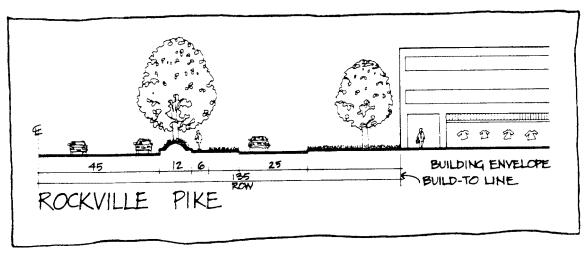


BAGE LEVEL DEVELOPMENT
The required streetscape treatment
includes a landscaped berm with trees
at the road edge, a 6' wide concrete
sidewalk and a service drive. Maintain
the built-to line at a distance of
195' from the centerline of Rockville
Pike to provide a consistent visual
image. Street trees shall be a min 3.5
inches in caliper, 15' high and planted
no more than 30' apart.

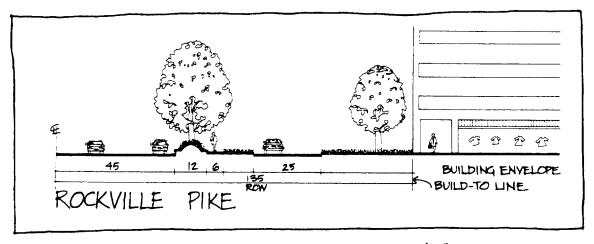


OPTIONAL METHOD DEVELOPMENT In addition to the minimum requirements stated above, optional method developments shall include: a splagh block at the Rockville Pike curb edge, London walk pavers, additional berm landscaping and a tree bed with landscaping at the building edge.





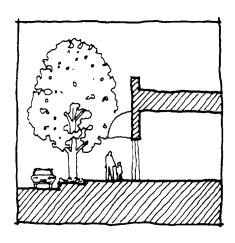
BASE LEVEL DEVELOPMENT



OPTIONAL METHOD DEVELOPMENT

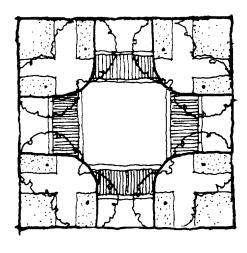
PEDEOTRIAN AREAS

The following guidelines define and suggest pedestrian oriented spaces and linkages. Elements such as sidewalks, crosswalks, bus shelters and benches improve convenience and make the pedestrian feel safe and comfortable. Also signs and lighting contribute to a pedestrian's orientation and safety. Signs must conform to the City's Sign Ordinance and lighting design is reviewed in the Twinbrook Metro Area.



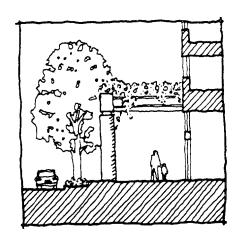
SIDEWALKS

A hierarchy of pedestrian pathways are designed to reflect pedestrian travel needs and aesthetic criteria relating to visual prominance. Gidewalks in commercial areas shall be a minimum of 6 feet in width. Residential area sidewalks shall be 5 feet wide when adjacent to the curb, or 4 feet wide when separated by a landscape strip.



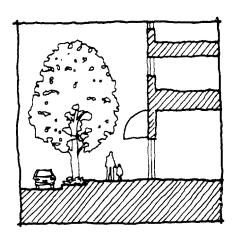
CROSSWALKS

Where public pedestrian ways cross private roads, cross walks shall be installed subject to approval by the Department of Public Works.



ARCADES & COLONNADES

Furnish a continuous covered passageway to provide weather protection in inclement weather. Arcades may be added to existing buildings or may be incorporated into the design of new buildings. Design arcades with a minimum depth of 12' and a minimum height of 12', not to exceed two stories.



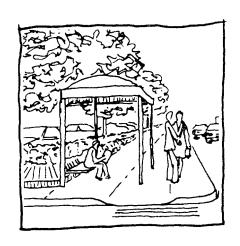
AWNINGS

In locations where building arcades and colonnades are not provided. Awnings may be used to enliven pedestrian areas and sidewalks. The use of bright fabric awnings over entrances and along walkways enhances pedestrian comfort and creates visual interest and vitality.



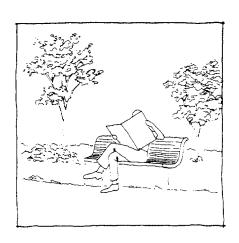
PLAZAS AND OPEN SPACES

Plazars and open spaces are defined on three sides by buildings, walls and landscaping. These elements greatly enrich the pedestrian environment by creating focal points. Features such as fountains, planters, cafes, special lighting and klosks should be included to create a pleasant setting.



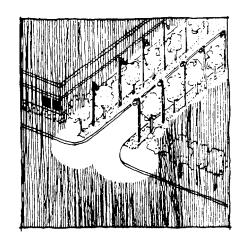
BUS SHELTER

The bus shelter to be used throughout the corridor is a protective feature with a long bench, tempered glass on three sides and posted bus schedules. The bus shelter shall be consistent with those being installed by WMATA.



BENCH

The standard bench to be used in or adjacent to the public rights of way throughout the corridor is the PATX (Pennsylvania Avenue Development Corporation) bench by Macatta. This bench is made of oak slats on a steel frame in "single" and in "back to back" versions.

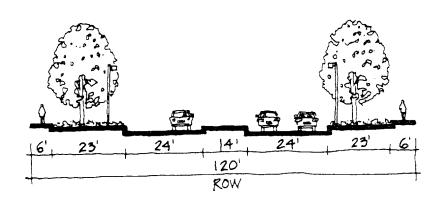


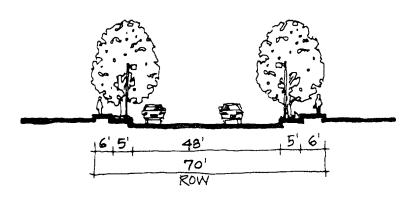
LIGHTING

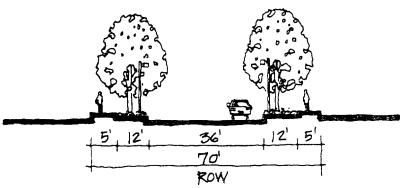
Redestrian areas should be adequately liter pedestrian orientation to ensure greater safety, security and visibility. Coordinated fixtures contribute to the creation of a unified and pleasing appearance. Selected lighting fixtures should complement the building design and streetscape.

PUBLIC ROADWAYS

Vehicular movement is enhanced by improving the existing roadway network in the Rockville Pike Corridor. These improvements offer more options to motorists, increase the efficiency of local circulation, improve access to properties, and decrease intersection congestion. All developments within the Rockville Pike Corridor that dedicate a public right of way or easement for improvements shown in the Plan may include the dedicated area in the net lot area for the purpose of calculating F.A.R. The following roadway standards are required for dedication and construction of new roads in the City:







ARTERIAL

Arterial roads are built in a right-of-way at least 120' wide, containing two 24' paved sections separated by a 14' median strip. Curbs, gutters, sidewalks, lighting and landscaping also must be provided.

BUSINESS DISTRICT

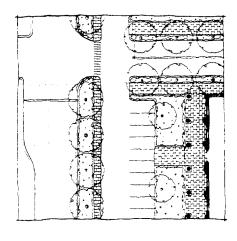
business district roads are built in a right-of-way at least 10' wide, containing a 40' pavement width. Curbs, gutters, sidewalks, lighting and landscaping also must be provided.

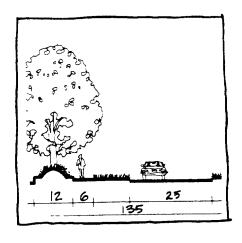
PRIMARY RESIDENTIAL

Primary residential roads are built in a right-of-way at least 70' wide containing a minimum pavement width of 36' for vehicular traffic. Curbs, gutters, sidewalks, lighting and landscaping also must be provided.

RPC URBAN DESIGN GUIDELINES SERVICE DRIVE

Service drives are designed to separate local traffic from through traffic along Rockville Pike. The service drive enhances safety and accessibility by enabling motorists to travel between nearby businesses and to exit parking areas at planned intervals. All developments that dedicate an easement for the service drive may include the dedicated area in the net lot area for the purpose of calculating F.A.R.



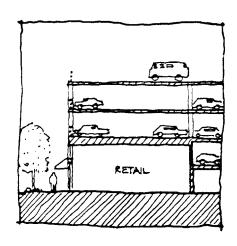


DESIGN STANDARDS

The service drive provide a convenient system to ensure free circulation of vehicular traffic and can function as a well-defined parking lot alse with head-in parking permitted on both sides. The coordinated alignment between adjacent properties increases its functional efficiency and its value as an organizing visual element. The width of the service drive may not be less than 25'. The location of entrance and exit driveways shall be in substantial accordance with the Rockville Pike Access Management Plan.

PARKING STRUCTURE TREATMENT

Parking structures should be sensitively designed to assure the harmonious integration of each facility with the adjacent commercial and residential tevelopment, as well as with its natural environment. A sense of yisual harmony can be achieved through the use of compatible materials, coordinated landscaping and screening, appropriate building color, sensitive lighting and signage, and the design of related amenities



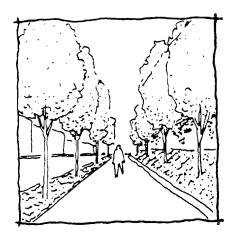
GROUND FLOOR USES

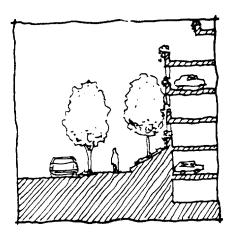
The effect of parking structures can be minimized by placing retail use along the street frontage. This creates interest and activity at the ground floor where pedestrians and motorists are located.



FACADE TREATMENT

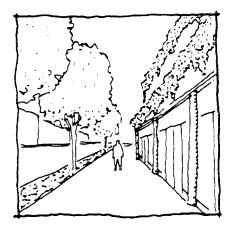
Farking structure facades should achieve the same high quality design and appearance as the buildings they serve. Minimize the parking structures utilitarian appearance by utilizing effective design treatments such as colonnades, areades, awnings, street furniture and other public amenities.

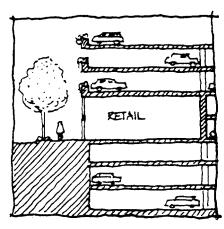




LANDSCAPING

Where ground floor retail is inappropriate, the use of landscaping is effective in softening hard edges and minimizing bulk. A structure may be set back from the building line to allow for an additional row of trees, berms and plantings. If constructed at the building line, the appearance may be improved with planters and stepped-back upper floors. Openings for vehicular access should avoid crossing major pedestrian paths and are subject to review by a Design Review Board, and must conform with the Rockville Pike Corridor Neighborhood Plan.



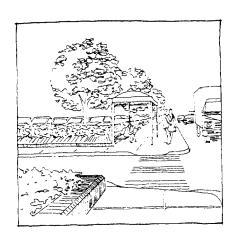


PARKING STRUCTURE HEIGHT

The height of parking structures should be minimized, especially at the street edge. The height of parking facilities that are blaced at the street edge should not exceed 25° above grade, and not will not be eligible for the additional building height available in the optional method of development. If a structure is enclosed within a building complex and not visible from the street, the building height restriction is 75°. Underground levels are encouraged to increase parking capacity.

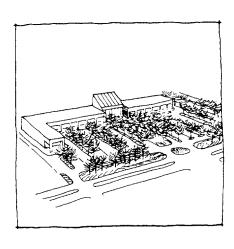
PARKING LOT TREATMENT

Parking lots should be screened from view from public roads and adjacent residential or developed areas. Buffering and screening shields unsightly areas and parked cars, defines special areas, creates attractive views, and provides a cohesive transition between non-similar uses.



PARKING LOT EDGES

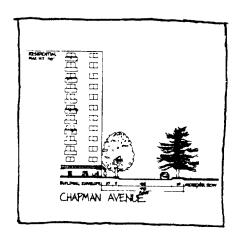
Parking lots adjacent to public rights-ofway shall be screened with evergreen plantings, ground-covered berms or walls at least 2.5 feet high. Achieve at least 75% continuous opacity to soften the visual impact. Farking lots adjacent or opposite to residential zoned or developed land shall be screened to a height of 5' with evergreen plantings, walls or earth berms achieving 100% opacity.



PARKING LOT INTERIORS
Deciduous trees should be used in
parking lots to relieve the monotony of
large paved masses. Trees planted
approximately so' apart in continuous
beds of ground cover provide an overhead canopy and define the space by
directing the line of pedestrian and
vehicular movement. Walkways should be
exparated from vehicular traffic by elevation,
landscaping or surface treatment such as brick
pavers, flagstone, or other safe and attractive
materials.

RPC URBAN DESIGN GUIDELINES LANDSCAPE SCREENING OF NON-SIMILAR USES

Plant a continuous row of coniferous (evergreen) trees between non-similar uses. The landscape buffer provides a transition between different zones, creates privacy, extreme unsightly areas and defines special areas. Trees at time of planting shall be a minimum of 15 feet high with at least 75% continuous opacity, planted in a diagonal grid.

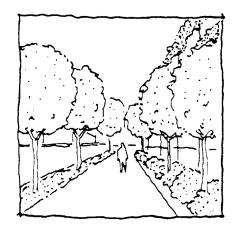


NON-SIMILAR USES

All developments in the RPC zone shall provide excreening between non-similar uses.

These include:

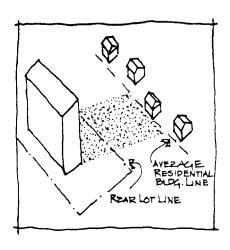
- 1. residential/retail
- 2. residential/office
- 3. residential/major road
- 4. Metro tracks/any use
- 5 as otherwise indicated



SCREEN RETAINING WALLS & FENCES
Plant a continuous landscape screen in
front of retaining walls and fences to
soften the mass and hard edges. Provide
75% opacity in a continuous row or
staggered planting.

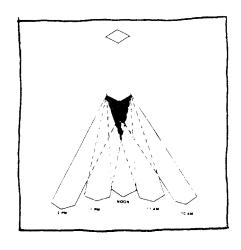
RPC URBAN DESIGN GUIDELINES SOLAR ACCESS REQUIREMENTS

In order to minimize the impact of tall buildings on residential structures, no buildings may cast a shadow on adjacent residential structures between 10 a.m. and 2 p.m. as calculated for December 21. The shadows produced on December 21 are the longest of the year and compliance will result in lesser impacts during the remainder of the year.



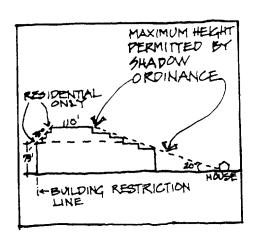
SHADOW STUDY

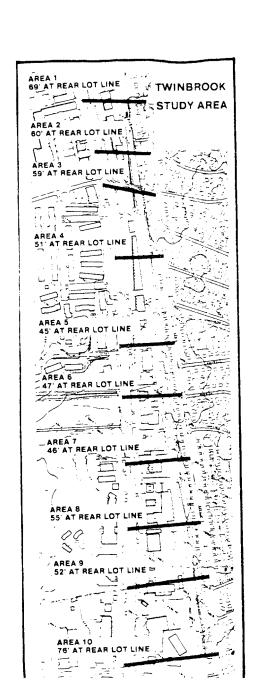
A shadow study is performed for developments that may cast shadows on residential structures. The shadow study follows the technique recommended for solar path diagrams in Architectural Graphics Standards, 7th Edition. This study should indicate the area where shadows will fall between 10 a.m. and 2 p.m. on December 21.



RESIDENTIAL TOWERS

Widely spaced towers are exempt from the solar access regulation. This is due to the small footprint of a tower that results in a thinner shadow which moves across the property quickly, much like a sundial. A residential tower is considered to be a building where the width is not more than 10% greater than the depth or vice versa. The separation between two towers must be at least equal to the height of the taller structure for them to be "widely spaced".





GENERAL APPLICATION

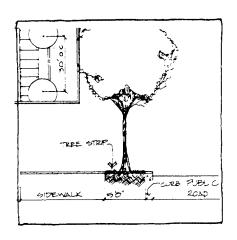
The accompanying sketches illustrate the general application of the Solar Access Requirement. The drawing to the left illustrates the maximum height permitted by the shadow ordinance; this approximates a 20° angle originating from the average residential building line. Compliance with the ordinance impacts the design of tall buildings, especially in light of the building envelope step-back required by the 45° layback plane along Pockville Pike.

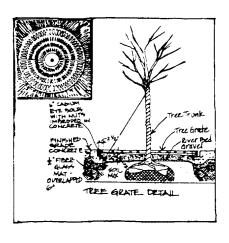
TWINBROOK CASE STUDY

The Twinbrook neighborhood was selected to test the effect of the Solar Access Requirements. Ten areas were designated for study and the average distance of the area's houses from the rear lot line of adjacent commercial properties was determined. A solar path diagram for 40° N. latitude was utilized for the study Rockville lies at 39'15", which results in shorter shadows. In practice, the individual shadow studies will produce greater accuracy.

RPC URBAN DESIGN GUIDELINES TREE PLANTINGS

The following guidelines attempt to make walking safe, convenient and attractive in the Rockville Pike Corridor.



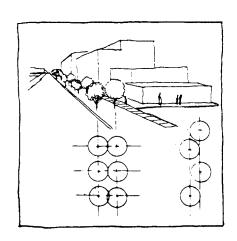


TYPICAL

Street trees shall be planted in continuous tree strips, a minimum of 5'-0" wide between the curb and sidewalk. Street trees at the time of planting shall be a minimum of 3.5 inch caliper, 15' high. Street trees shall be planted about 30' on center parallel to the street. In no cases should trees be planted more than 40' apart. Trees shall be selected from the City of Rockville's Approved Tree List.

GRATE DETAIL

When trees are to be planted in continuous paved areas they shall be planted in tree bits with grates.



PLANTING GRIDS

Where parallel rows of trees frame a pedestrian way or other pathway, they shall be planted on a rectangular grid. In certain cases where the local site distates, or, when 100% opacity is desired at the time of planting, trees may be planted in diagonal grids.

URBAN DESIGN RECOMMENDATIONS

The accompanying illustrations and paragraphs describe the urban design concept. Public improvements are identified by number and described in the text. Several proposed private developments and a number of hypothetical private developments that illustrate the objectives of the urban design guidelines are also described. This plan assumes that the recommended highway and transportation plan is completed. If these improvements are not in place, development yields will be lower.

The standards included in the urban design chapter element provide the framework for private and public development decisions along the Pike. The increased emphasis on landscaping and pedestrian activity will provide for a pleasant and more efficient commercial area. Additional guidance for land use and development in the vicinity of the Twinbrook Metro Station is included in Chapter VI.

Northern Pike

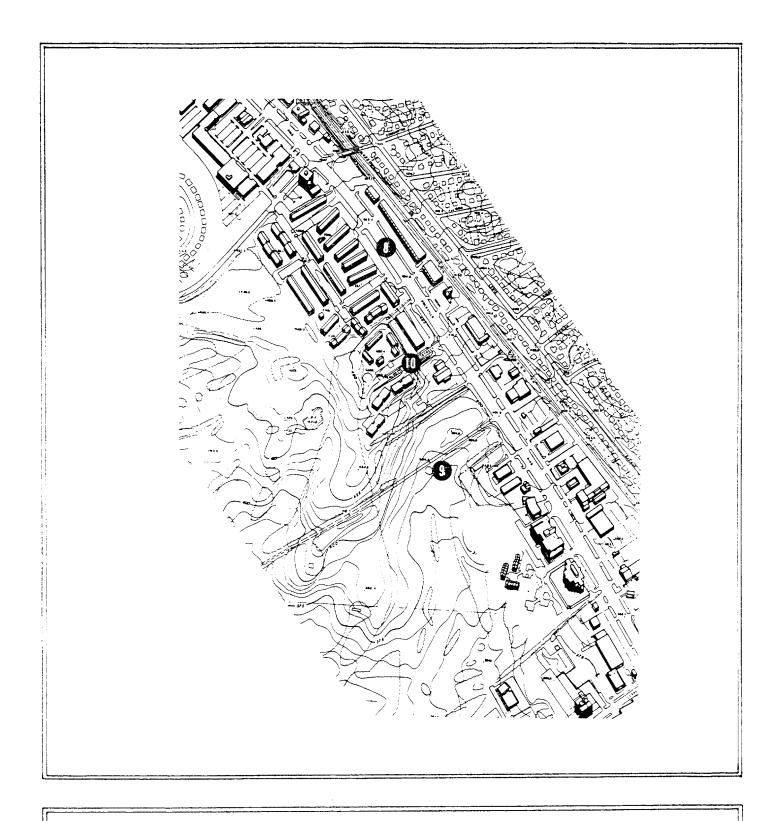
- 1. Within the Rockville Pike right of way, the City will require compliance with the streetscape plan. Crosswalks will be installed at a number of intersections.
- 2. The Veteran's Park will be a landscaped memorial identifying the gateway to the Town Center.
- 3. The anticipated completion of the Jefferson Plaza complex will result in buildings of a comparable size to Jefferson Plaza I. The O-1 Zoning allows an FAR of 3.0, building heights of up to 75 feet with office as the primary use. Primary access to this complex will be from Fleet Street.
- 4. The Firemen's Carnival Grounds is designated for O-1 Zoning and will be similar in character to Jefferson Plaza in combination with Jefferson Plaza will serve as the transitional area between the corridor and the Town Center.
- 5. The area immediately south of Dodge Street is identified for moderate intensity mixed use development.
- 6. The City will extend Fleet Street southeast to Ritchie Parkway between Ritchie Center and the residential neighborhood to the southwest. The residences will be partially protected from the new street by the additional landscaping within the right of way.
- 7. Ritchie Parkway will be extended from Rockville Pike to Seven Locks Road along a new alignment. It will be lined with trees and the neighborhoods to the west will be screened from the parkway.



NORTHERN PIKE URBAN DESIGN RECOMMENDATIONS

Middle Pike

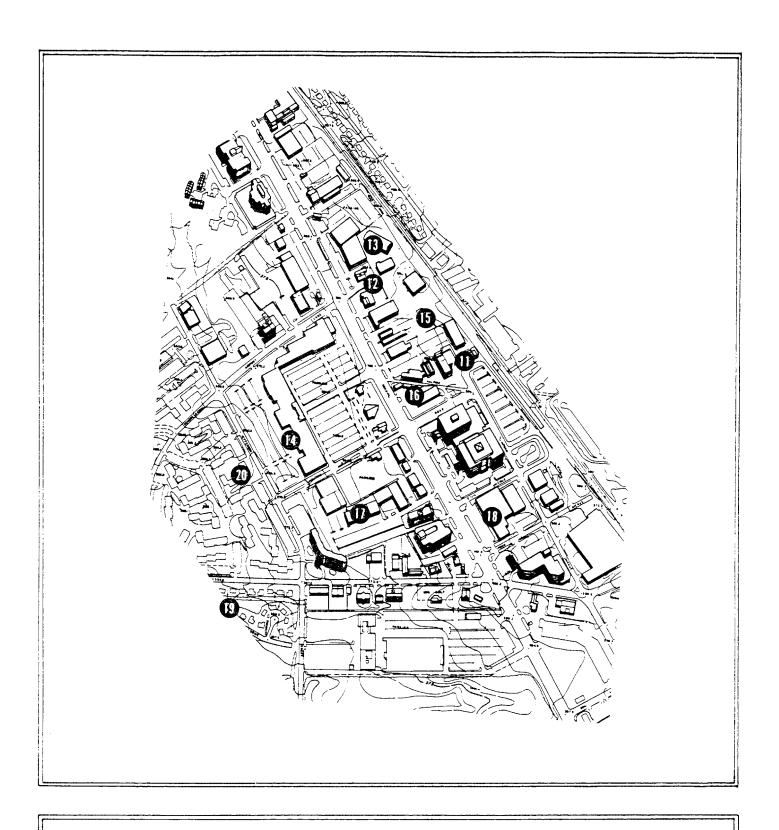
- 8. Within the Rockville Pike right of way, the City will require compliance with the streetscape plan.
- 9. The Woodmont Country Club is recommended and expected to remain in its current use.
- 10. Talbott Street's existing residential and commercial character will be retained.



MIDDLE PIKE URBAN DESIGN RECOMMENDATIONS

Southern Pike

- 11. The extension of Chapman Avenue north from Halpine Road will intersect with Rockville Pike north of Congressional Airport Lane.
- 12. The City proposes to extend Congressional Airport Lane as a oneway road northeast to connect with extended Chapman Avenue.
- 13. A hypothetical mixed-use development on the Devlin Lumber Company site might include a residential tower, retail and office space. Chapman Avenue extended would take the northeastern edge of the Devlin Lumber Company property, and Congressional Airport Lane extended would cut the remainder of the Devlin properties in two. While imposing design constraints, the dedication of these roads will permit the same theoretical yields as without the roads since the dedicated area may still be counted for FAR calculations.
- 14. A mixed-use development of Congressional Plaza could include retail space and office with residential along East Jefferson Street. Pedestrian overpasses that would connect with Congressional North and South and the east side of Rockville Pike may improve pedestrian mobility and the marketability of the site.
- 15. Because the land has multiple owners, assembly of the group of properties between the Devlin Lumber Company, the Rocca property and Chesapeake Plaza may be difficult. If assembled, these properties might accommodate a Metro-oriented mixed-use development. In addition, the concurrent development would permit the construction of Chapman Avenue with a minimum amount of displacement.
- 16. A mixed-use development on an assemblage of the Rocca and Radio Shack properties could include apartments, retail space and office space.
- 17. A hypothetical expansion of Congressional South could contain increased retail space, and a combination office, hotel and residential space.
- 18. Twinbrook Square's redevelopment could consist of an office / retail component with a number of residential units oriented to Chapman Avenue.
- 19. Montrose Neighborhood Traffic Control to be designed in cooperation with the Montrose neighborhood and the City.
- 20. The residential character of the Congressional Towers, Rollins Park Apartments and the Montrose neighborhood will be protected.



SOUTHERN PIKE URBAN DESIGN RECOMMENDATIONS

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